NGC-162/000388-280

12

# REMARKS

Initially, applicant would like to express their appreciation to Supervising Patent Examiner Gregory J. Toatley, Jr. for the courtesies extended to attorney James Milton during a telephone conversation on May 11, 2006. The telephone conversation involved a discussion of the objection to FIG. 3. Supervising Patent Examiner Toatley indicated that Examiner Samuel Turner was unavailable due to an illness, and that applicant could respond to the objection by indicating that the nature of the objection is not clear.

Claims 1-12 are pending. Claims 1-13 were rejected under 35 U.S.C. § 112, second paragraph. Claims 1-13 were rejected under 35 U.S.C. § 102(b). The specification and drawings were objected to.

## Objection to the Drawings

FIG. 3 was objected to because the Examiner believes that beam splitter 24 and phase modulator 26 are confusing.

The nature of the objection is not clear and applicant requests a clarification. This is because, referring to FIG. 3 and page 9, lines 12-20 of applicant's specification, light source 22 can provide a light signal 15 to beam splitter 24, and beam splitter 24 can split the light signal into two light signals that travel in opposite directions 34, 36 along an optical path defined by optical waveguide 28. Beam splitter 24 can receive the two light signals exiting from optical waveguide 28, combine the two light signals, and provide the combined light signal 16 to signal digitizer 30. Based on the combined light signal 16, signal digitizer 30 can produce an output signal proportional to a phase difference between the two light signals exiting the optical waveguide 28.

Thus, light from beam splitter 24 does not directly pass to electrical subsystem 14 because light signal 16 is the re-combined light signals 34, 36 that exit phase modulator 26.

## Objection to the Specification

The specification was objected to because of an informality on page 11. Applicant has responded by replacing the symbol "Q" with the symbol " $\Omega$ ".

### Rejection Under 35 U.S.C. § 112

Claims 1-13 were rejected under 35 U.S.C. §112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has responded by replacing certain instances of the term "one or more" with the term "at least one" in claims 1-4, 7-8 and 11-12.

# Rejection Under 35 U.S.C. § 102(b)

Claims 1-13 were rejected under 35 U.S.C. §102(b) as being anticipated by Noureldin et al., "Computer Modelling of Microelectronic Closed Loop Fiber Optic Gyroscope", 1999 IEEE, May 9-12, 1999.

Applicant has avoided this ground of rejection for the following reasons.

Claim 13 has been canceled. Applicant has amended independent claim 1 to include therein the limitations from claim 13 along with other limitations. As a result, Noureldin does <u>not</u> teach applicant's claim 1 limitation, as amended, that now recites,

wherein the one or more performance parameters comprise one or more of a bandwidth of the fiber optic gyroscope, a coefficient of random walk of the fiber optic gyroscope, an operating frequency of the fiber optic gyroscope, and a power spectral density of noise of the fiber optic gyroscope; and

wherein the coefficient of random walk is not limited to a calculation based on shot noise or thermal noise in a photodetector.

Instead, Noureldin teaches that angle random walk is the white noise that results from either the shot noise or the thermal noise in a photodetector. Thus, Noureldi's angle random walk is limited to the shot noise or the thermal noise in a photodetector.

In view of the foregoing, applicant submits that Noureldin does not describe each and every element of claim 1, and therefore claim 1 is not anticipated by Noureldin. Since claims 2-12 depend from allowable claim 1, this claim is also allowable over Noureldin.

14

NGC-162/000388-280

#### Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

In view of the above amendments and remarks, allowance of all claims pending is respectfully requested. If a telephone conference would be of assistance in advancing the prosecution of this application, the Examiner is invited to call applicants' attorney.

Respectfully submitted,

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